US DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Northeastern Area
State & Private Forestry
DIVISION OF FOREST PEST CONTROL

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AERIAL SURVEY OF JACK-PINE BUDWORM DEFOLIATION ON THE NICOLET NATIONAL FOREST

By Glen Erickson

INTRODUCTION

The current outbreak of the jack-pine budworm, Choristoneura pinus pinus Freeman, started in 1966 on state land near Conover, Wisconsin.

Last year (1968) heavy budworm defoliation was found in all jack pine types in T42N,R11E and T32-33N,R17E.

METHODS

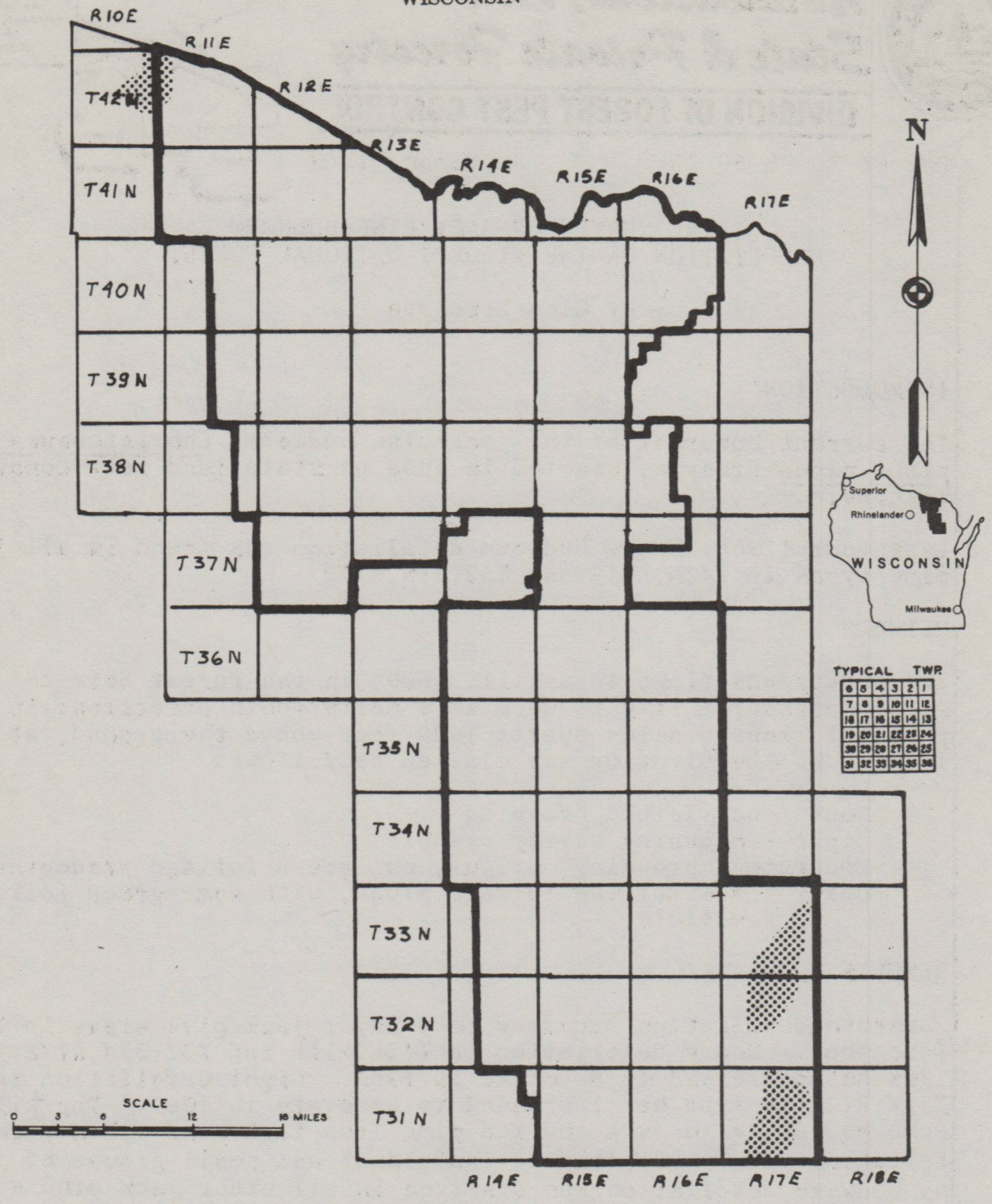
The survey was flown August 11, 1969, in the Forest Service Aero-commander. Flights were in a north-south direction; in parallel lines 6 miles apart; 1000 feet above the ground; at 100 m.p.h. Defoliation was classed as follows:

None - no visible browning
Light - browning barely visible
Moderate - browning obvious, but green foliage predominates
Heavy - Most of the foliage brown, with some green foliage visible

RESULTS

Moderate defoliation occurred to 3 major jack-pine areas in 1969. (see map). Heavy defoliation in T42N,R11E and T32-33N,R17E in 1968 has decreased to moderate in 1969. Light defoliation in T31N,R17E in 1968 has increased to moderate in 1969. Top kill and some mortality to jack and red pine from last year's heavy defoliation can be expected to individual and small groups of trees. No budworm defoliation was observed in all other jack-pine areas.

NICOLET NATIONAL FOREST
WISCONSIN



JACK PINE BUDWORM DEFOLIATION — 1969

MODERATE